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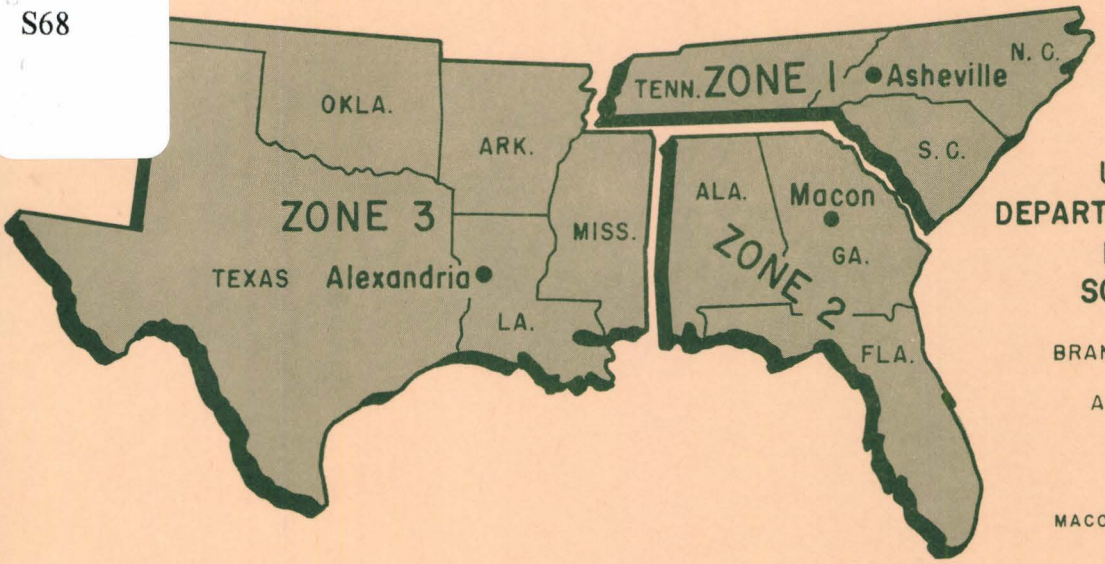
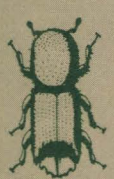
SOUTHERN FOREST PEST REPORTER

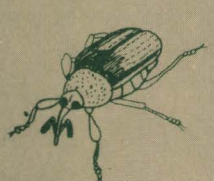


UNITED STATES
DEPARTMENT OF AGRICULTURE
FOREST SERVICE
SOUTHERN REGION

BRANCH OF FOREST INSECT
AND DISEASE CONTROL
FIELD OFFICES
ASHEVILLE, N.C.
MACON, GA. ALEXANDRIA, LA.

Number 1 | 50 SEVENTH ST. N.E. ATLANTA, GEORGIA 30323 | February 1966





SUMMARY OF CONDITIONS

... We welcome the State Foresters' organizations of Kentucky and Virginia and the Cumberland, George Washington and Jefferson National Forests to the Southeastern Area Forest Insect and Disease Control.

... Extremely heavy infestations of the southern pine beetle continue in Alabama, Mississippi, North Carolina and Tennessee. Populations in Georgia, Louisiana, South Carolina, Texas and Virginia, while still active, have decreased to some extent. Controls are being carried out in all known infested areas by salvage supplemented by chemical methods.

... Systematic observations of seed and cone insect populations on selected areas indicate that populations were relatively low in 1965. Most common insects infesting seeds and cones were Dioryctria, Laspeyresia and a coneworm believed to be a species of Eucosma.

... Surveys of the spruce-fir type in North Carolina and Tennessee detected several previously unknown infestations of the balsam woolly aphid on Roan Mountain.

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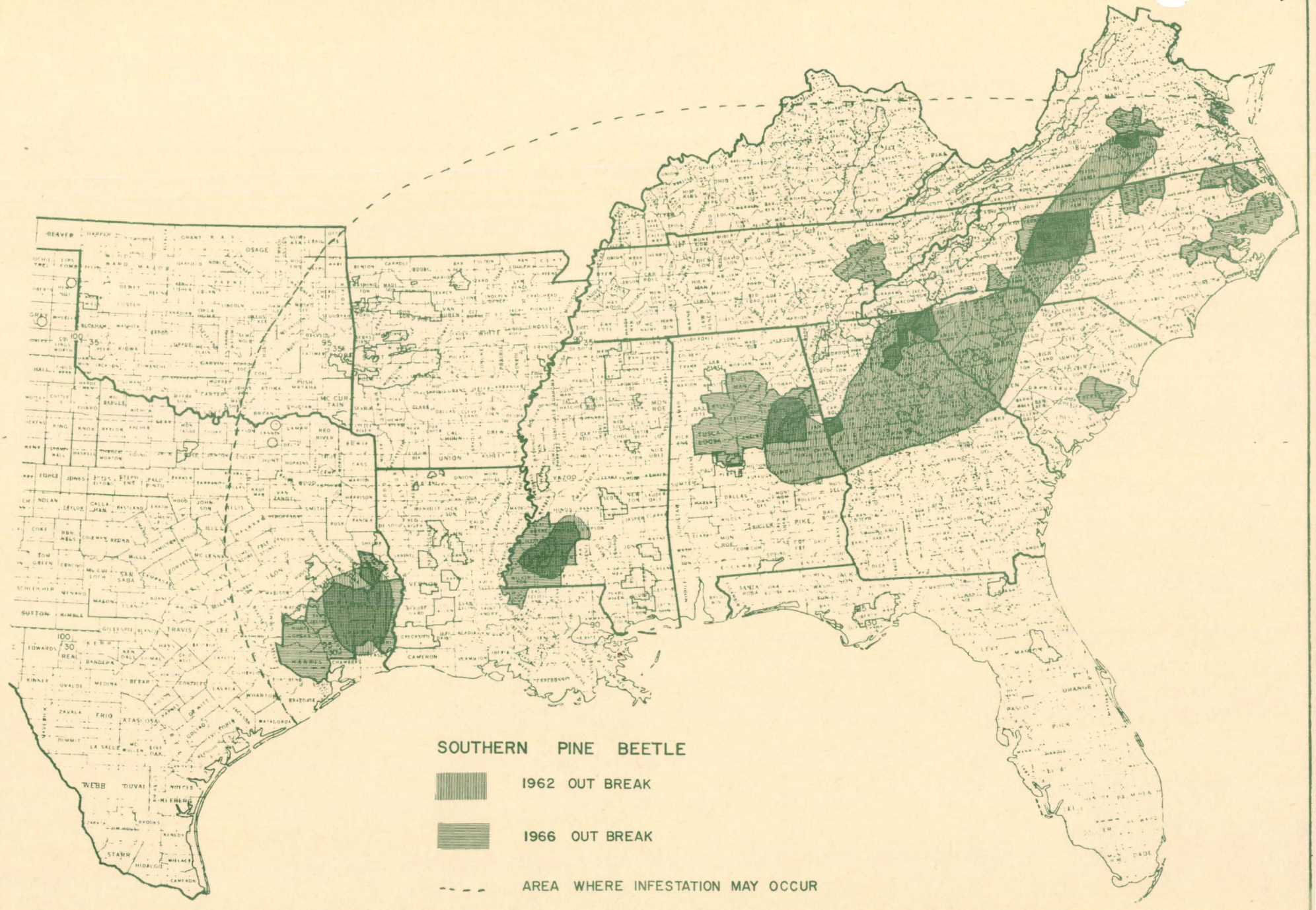

SOUTHERN PINE BEETLE
1962 OUT BREAK
1966 OUT BREAK
AREA WHERE INFESTATION MAY OCCUR

STATUS OF FOREST INSECTS

SOUTHERN PINE BEETLE, Dendroctonus frontalis Zimm.

GENERAL

Southern pine beetle infestations are more general and in some cases more intense than at any time during the last 7 years. (See Map on Page 2) No doubt there are additional undetected infestations in the counties adjacent to those shown on the map.

The low temperatures prevailing for a short time the latter part of January will no doubt reduce beetle populations to some extent. However, it will be some time before the full impact of the cold weather can be determined.

ALABAMA

Chemical control operations are continuing on Oakmulgee, Shoal Creek, Talladega and Tuscaloosa Districts of the Talladega National Forest. Efforts are being made to treat all known infestations prior to spring emergence.

Salvage and/or chemical control measures are being applied by some private landowners on infestations occurring in Central Alabama. These infestations occur in Blount, Jefferson, Shelby, St. Clair and Walker counties.

GEORGIA

Scattered infestations continue at a low level on private land in the northeast and west central portion of the State. No control is being attempted at the present time. Scattered infestations are still present on the Chattooga and Tallulah Districts of the Chattahoochee National Forest. Control on these Districts was discontinued in July and has not been resumed.

LOUISIANA

Southern pine beetle activity is continuing at a low level in Allen Parish and is confined to the West Bay area. An evaluation survey in November showed a slight decrease in number of infested trees per 1,000 acres over one conducted in September. Surveys in Calcasieu Parish showed a substantial decrease in beetle activity. The number of trees per 1,000 acres decreased from approximately 60.10 in August to 1.33 in November.

MISSISSIPPI

Southern pine beetle activity is continuing on the Homochitto National Forest. Infestations declined in September to 5.00 trees per 1,000 acres, but increased in December to 11.33. This is an unusually high degree of infestation for this late in the season. A late season build-up was also reported on private lands.

NORTH CAROLINA

The unusual warm dry fall weather contributed to an increase in southern pine beetle activity especially in the upper piedmont counties of Davie, Davidson, Forsyth, Iredell, Rowan and Yadkin. There are fewer and less vigorous outbreaks in Catawba, Guilford, Mecklenburg, Randolph, Stokes, Scurry and Wilkes counties. Infestations in the northeastern part of the State and in Granville County have decreased.

During the period July through December, 256,172 infested trees were salvaged and an additional 11,936 chemically treated. The salvaged trees produced 14,610 cords of pulpwood plus 7,818,000 board feet of sawtimber. The salvaged timber is estimated to have returned $272,000 to the 1500 families concerned.

The December survey located about 4,000 beetle spots. Most of these spots contained less than 5 trees, but 134 contained more than 100 trees each. Additional effort in salvage and chemical control is being made to complete most of the control effort before warm weather.

SOUTH CAROLINA

Infestations are continuing at moderate levels on the Andrew Pickens District in the northwest corner of South Carolina. Single tree infestations were reported on the Francis Marion National Forest in December. Ground checks by Forest Insect and Disease Control personnel indicate a large number of single tree infestations and small groups of infested trees. Most of the crowns are still green, therefore, infestations are not conspicuous from the air. Brood densities are high indicating a possible build-up in this area.

TENNESSEE — Southern pine beetle infestations continue to cause widespread losses in eastern Tennessee, especially in Anderson, Knox, Loudon and Roane counties. The level of infestation averaged 858 infested trees per 1,000 acres in October and is now estimated to be 1226.6 trees per thousand acres on the Oak Ridge Atomic Energy Reservation. Several spots in excess of 1,000 red-topped and fading pines were found on private lands adjacent to the reservation.

TEXAS — Southern pine beetle control operations were intensified in November to take care of a slight increase in activity that occurred during the extended period of warm weather in October. All known infestations, detected by operational flights, were controlled by mid-December. The evaluation survey made in January 1966 showed 2.75 southern pine beetle infested trees per 1,000 acres. This was identical to the number found in a survey in September 1965. Operational detection flights and control measures will be started early in 1966 so as to prevent a build-up in the spring from overwintering populations. (Texas Forest Service)

VIRGINIA — Southern pine beetle infestations continue in Amealia, Buckingham, Cumberland and Prince Edward counties on private land. Localized infestations occur on the eastern shore at the Camp Perry Naval Weapons Center and along the Yorktown National Historical Parkway.

BLACK TURPENTINE BEETLE, Dendroctonus terebrans (Oliver)

TEXAS — Control measures were used for the insect on National Forest land in Walker and Montgomery counties. Damage was found on an area of about 100 acres; 103 trees were treated during November. (Texas Forest Service)

REGION — Infestations over the remainder of the States in the Region were normal for the season with some localized attacks in logging, stumping and naval stores areas.

IPS ENGRAVER BEETLES, Ips spp.

ARKANSAS — Ips spp. remained at a static level or decreased in nearly all areas. A few localities reported increased activity, due partly to lightning strikes or other stress. Salvage operations were underway to remove infested trees from some sites. (Arkansas Forest Pest Report)

LOUISIANA — An operations recorder survey by the Louisiana Forestry Commission in September showed Ips to be the primary cause of mortality in 63 percent of the trees inspected. (Louisiana Forestry Commission)

REGION — Ips populations over the remainder of the Region were normal for the season. Some local activity, especially in plantations, on the George Washington National Forest in Virginia.

SEED AND CONE INSECTS

ARKANSAS — Two shortleaf pine seed production areas on the Ozark-St. Francis National Forest were sprayed with a helicopter to suppress seed and cone insect infestations. Results of the evaluation indicated that there was a slight difference in cone damage between spray and check areas. Cone samples from the Granny Gap Seed Production Area showed 39.6 percent of the cones damaged on the check, and 22 percent damaged on the sprayed. Salus Seed Production Area cone samples showed 20 percent damage on the check and 13.2 percent damage on the sprayed. Dioryctria accounted for the major portion of the damage to first and second year cones on both seed production areas. Laspeyresia was the next most damaging insect and caused damage only in second year cones. Light damage by thrips was observed in the spring.

LOUISIANA — A systematic survey of seed and cone insect populations on the Vernon Longleaf and the Colfax Loblolly Seed Production Areas on the Kisatchie National Forest indicated that infestations were relatively high in 1965. On the Vernon Longleaf Area 42.5 percent of the cones sampled showed damage. Dioryctria accounted for 19.5 percent and Laspeyresia 21.5 percent. Damage on the Colfax Loblolly Area was 28 percent of the cones sampled, Dioryctria causing 21.5 percent of the damage and Laspeyresia 6.5 percent.

NORTH CAROLINA

A systematic observation of seed and cone insect populations at the Persimmon Creek Shortleaf Pine Seed Production Area on the Nantahala National Forest indicated that infestations were relatively low in 1965. The most destructive insect was Dioryctria sp. which accounted for 1.1 percent of the damage.

SOUTH CAROLINA

Individual trees in a longleaf pine seed production area on the Francis Marion National Forest were sprayed with fixed-pipe sprayer system to suppress infestations of seed and cone insects, primarily Dioryctria clarioralis. Results of the evaluation indicate that there was no apparent difference between sprayed and check trees but population levels were generally low throughout.

Two loblolly pine seed production areas near Edgefield, South Carolina, were sampled to determine the status of seed and cone insect infestations. Losses were at a relatively low level. Dioryctria amatella was the most destructive insect pest of second year loblolly pine cones and accounted for less than 2.5 percent of the cones sampled. Other insect pests of loblolly pine cones included D. clarioralis, and a seedworm Laspeyresia sp. A cone beetle, Pityophthorus sp., was found infesting first year cones.

A coneworm believed to be a species of Eucosma was collected from shortleaf pine cones near Edgefield, South Carolina. Infestations accounted for a loss of 19.4 percent of the cones on an individual shortleaf pine sampled during June 1965. This was the most destructive insect enemy of shortleaf pine cones collected in 1965 and is of particular interest because the genus Eucosma is not previously reported as destructive to cones of southern yellow pines. Typical damage was also noted in North Carolina and Tennessee. Larvae of this coneworm recently were identified as Eucosma "near or cocana Kft." by D. M. Weisman.

BALSAM WOOLLY APHID, Chermes piceae (Ratz)

NORTH CAROLINA & TENNESSEE

Aerial and ground surveys of the native spruce-fir type in North Carolina and Tennessee revealed seven previously unknown infestations. All were on Roan Mountain. Some spread and

additional mortality was observed in known infestations. The Balsam Mountains is the one remaining area apparently free of aphid infestation.

VIRGINIA — Scattered Balsam fir (Abies balsamea var. phanerolepis) is infested in the Shenandoah National Park near Skyland. Gouting is more prevalent on this species than it is on Fraser fir. No infestations have been detected on the native spruce-fir type on Mt. Rogers.

MISCELLANEOUS INSECTS

ARKANSAS — A two-day survey in September in areas subject to heavy walkingstick activity in recent years was negative. Very few phasmids were noted and no defoliation was present. (Arkansas Forest Pest Report)

KENTUCKY — Severe feeding injury by pales weevil occurred in small white pine plantations on the Williamsburg District of the Cumberland National Forest. Damaged trees averaged five feet in height.

FLORIDA — A 200-acre, eight-year-old slash pine plantation was defoliated by the pine sawfly, Neodiprion merkeli, in Taylor County.

KENTUCKY — The Virginia pine sawfly, Neodiprion pratti pratti, is currently causing defoliation on 15 to 20 thousand acres in the northeastern part of the State. Portions of the infestation are on the Morehead District of the Cumberland National Forest. The Forest has submitted a project proposal to treat approximately 700 acres including a memorial plantation and some recreation areas. Egg surveys indicate that defoliation will be negligible to light during 1966 on the Morehead District.

FLORIDA — An infestation of the red-headed pine sawfly, Neodiprion lecontei (Fitch) was recently reported on 14,000 acres of uneven aged longleaf pine on the Ocala National Forest in Lake County. Many of the 12-15 year-old saplings were severely defoliated.

STATUS OF FOREST DISEASES

ANNOSUS ROOT ROT, Fomes annosus (Fr.) Cooke

GEORGIA — Three slash pine plantations in Colquitt County exhibited considerable loss from annosus root rot. Less damaging infection centers were found in shortleaf pine in Coweta County and in white pine in Spalding County.

MISSISSIPPI — A new Fomes annosus infection center was found on the Natchez Trace National Parkway, Jefferson County, Mississippi.

TEXAS — The disease was found in a loblolly pine plantation thinned about 6 years ago. The stand was inspected in 1962 for presence of the disease; no evidence of conks was found at that time. Infection centers were found throughout about 100 acres of the stand when checked during December. Mortality is increasing in the plantation. (Texas Forest Service)

VIRGINIA — An evaluation of the effect of stump treatment is underway on the Dry River District of the George Washington National Forest.

FUSIFORM RUST, Cronartium fusiforme

MISSISSIPPI — Fusiform rust cankers were found on more than 90 percent of the pine on the Coles Creek picnic area of the Natchez Trace National Parkway, Mississippi.

REGION — Southern fusiform rust continues to cause damage in young slash and loblolly pine plantations throughout the South. These species are more seriously affected when growing on former longleaf sites.

MISCELLANEOUS DISEASES

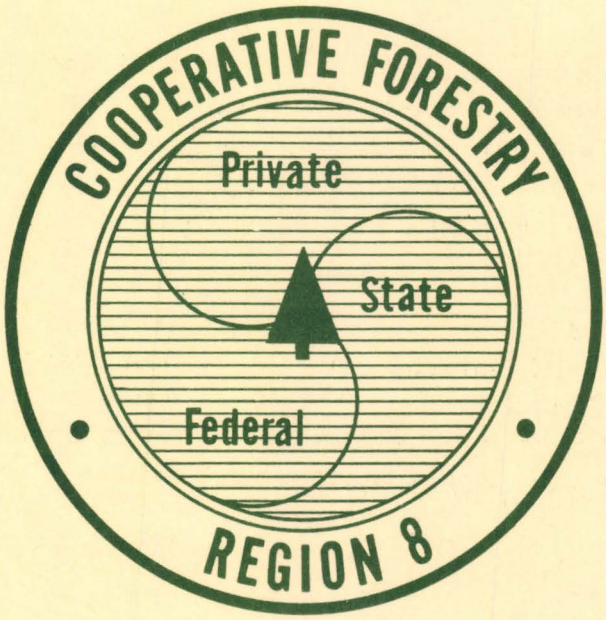
KENTUCKY — Littleleaf disease is prevalent over some 5-10 M acres of shortleaf pine type on the Williamsburg and Stearns Districts of the Cumberland National Forest.

ALABAMA — Loblolly pine exhibiting symptoms of "loblolly pine die-off" (cause undetermined) was examined on the Talladega Ranger District. Numerous "die-off" centers have been located in a 150,000-acre area in and adjacent to the Ranger District. An evaluation of the mortality rate of the affected trees is in progress.

GEORGIA — Symptoms of "oak decline" have been observed on approximately 85 oaks, primarily southern red oak, in Bulloch, DeKalb, Jenkins and Monroe counties. Of the 40 infected trees observed in Bulloch County, 20 percent were dead. Several genera of fungi have been isolated from the infected trees but the cause has not been determined.

More detailed information can be obtained by writing to the Forest Insect and Disease Control Branch Zone Offices listed below or to the Atlanta Office:

ZONES	FOR STATES OF:
Zone 1 William M. Ciesla Zone Leader P. O. Box 1211 Asheville, North Carolina 28802	Kentucky North Carolina South Carolina Tennessee Virginia
Zone 2 William H. Padgett Zone Leader P. O. Box 1077 Macon, Georgia 31202	Alabama Florida Georgia
Zone 3 Henry H. Galusha, Jr. Zone Leader 2500 Shreveport Highway Pineville, Louisiana 71360	Arkansas Louisiana Mississippi Oklahoma Texas


COOPERATIVE FORESTRY
Private
State
Federal
REGION 8